

**SELECTED ACQUISITION REPORT (SAR) SUMMARY TABLES**

**As of Date: December 31, 1989**

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**UNCLASSIFIED**

**Department of Defense  
Cost Management, OUSD(A)  
March 30, 1990**

## **SELECTED ACQUISITION REPORTS - HIGHLIGHTS**

**(As of December 31, 1989)**

The Department of Defense has released details of cost and schedule changes since the September 1989 reporting period based on the Selected Acquisition Reports (SARs) submitted to the Congress for the December 31, 1989 reporting period. Included are SARs on 96 programs that have been reported previously and 4 additional reports being submitted for the first time.

SARs summarize the latest estimates of cost, schedule, and technical status on major defense systems. These reports are prepared annually (as of December 31) in conjunction with the President's budget for each funded program. After each subsequent calendar year quarter, reports are required only for those programs experiencing unit cost increases of at least 15 percent or schedule delays of at least six months.

The program acquisition cost estimates provided in the SARs include research and development, procurement, and military construction. The estimates of total program costs reflect actual costs on delivered hardware and the FY 1991 President's budget. For the most part, the years beyond FY 1991 have been adjusted only for inflation and consistency with the FY 1991 budget decisions. It is important to note that in several cases the report identifies existing procurement plans of the military departments beyond the periods that were included in previous reports.

A FYDP consistent with the FY 1991 budget and these SARs will be provided to the Congress in mid-April. Decisions to bring the outyear funding levels down to the President's approved topline for FY 1992-94 will be made in connection with the upcoming program and budget review in support of next year's FY 1992 and 1993 biennial budget submission.

The cost for one of the 96 programs, the Army's All Source Analysis System (ASAS), is classified. The adjusted current estimate of program acquisition costs for the remaining 95 major systems covered by SARs for the September 1989 reporting period was \$806,623.8 million. The cost changes between September and December 1989 are summarized below:

Current Estimate  
( \$ in Millions )

**September 1989 (98 programs\*)**   **\$ 806,284.1**

Plus one new program (Advanced Anti-Tank Weapon +3,936.5  
System-Medium)

Less terminated reports on four programs -2,226.7  
(Army Command and Control Systems-Common Hardware  
Software, Anti-Tactical Missile, Common Strategic  
Rotary Launcher, and Microwave Landing System)

Less Basic and Passive Optical Seeker -1,370.1  
Technique portions of STINGER program and  
Communications Nodal Control Element portion of  
TRI-TAC program\*\*

**September 1989 Adjusted (95 programs\*)**                                   **\$ 806,623.8**

**Changes Since Last Report:**

Economic	\$ +26,532.7
Quantity	+1,064.7
Schedule	+2,310.7
Engineering	-2,093.3
Estimating	+6,100.1
Other	-247.9
Support	<u>-2,685.8</u>

Net Cost Increase   \$ +30,981.2

Plus procurement and MILCON initial estimates +6,243.2  
for Fixed Distributed System (previous reports  
were limited to RDT&E only; see below)

**December 1989 (95 programs\*)**                                   **\$ 843,848.2**

The cost increase of \$30,981.2 million, or 3.8 percent, was due primarily to increased outyear inflation rates (\$+26,532.7 million). Details of the most significant changes are summarized in the attachment.

Prior to full scale development approval, Title 10, United States Code, Section 2432 permits cost estimates to be limited to the development program. With the transition to full scale development, estimated procurement and MILCON costs of \$6,243.2 million have been added to the Fixed Distributed System (FDS) SAR. This increase does not represent cost growth, but establishes a total program acquisition baseline from which future changes will be measured.

*\*Classified costs for the Army's ASAS program are excluded.*

*\*\*These are subelements of the STINGER and TRI-TAC programs which are no longer included in those SARs, since they have met statutory completion criteria.*

New SARs  
(As of December 31, 1989)

The Department of Defense has prepared four additional reports for the first time. These reports do not represent cost growth. Baselines established on these programs will be the point from which future changes will be measured. The current cost estimates are provided below:

<u>Programs</u>	Current Estimate (\$ in Millions)
LONGBOW (Airborne Adverse Weather Weapon System)*	\$ 706.2
ACM (Advanced Cruise Missile)	6,859.1
CMU (Cheyenne Mountain Upgrade)	1,568.7
E-3A Radar System Improvement Program	<u>689.9</u>
Total	\$ 9,823.9

*\*Pre-Milestone II program reporting the RDT&E cost only, in accordance with the provisions of Title 10, USC, Section 2432.*

## Program Change Explanations

(As Of December 31, 1989)

### Army:

ADDS (Army Data Distribution System) - Program costs increased \$330.5 million (+11.7%) from \$2,827.5 million to \$3,158 million, due primarily to revised escalation rates (\$+166.1 million), a schedule stretchout of two years (\$+128.3 million), and increased development costs for downsizing the Net Control Stations and development of micro-size Enhanced Position Location Reporting System User Units (\$+31.4 million).

ATACMS (Army Tactical Missile System) - Program costs increased \$577.4 million (+36%) from \$1,604 million to \$2181.4 million, due primarily to a quantity increase of 597 missiles from 2,237 to 2,834 (\$+516.6 million), stretchout of the delivery period associated with the increased quantities (\$+23.8 million), and revised escalation rates (\$+49.5 million).

FAAD C2I (Forward Area Air Defense Command, Control and Intelligence) - Program costs increased \$394.2 million (+21.5%) from \$1,829.7 million to \$2,223.9 million, due to increased program requirements for Pre-Planned Product Improvements through FY 2006 (\$+400.5 million) and revised escalation rates (\$+52.4 million). These increases were partially offset by a downward revision in program estimates (\$-58.7 million).

FAADS NLOS (Non-Line of Sight Fiber Optic Guided Missile) - Program costs decreased \$2,289.6 million (-78.4%) from \$2,920.4 million to \$630.8 million, due primarily to cancellation of the procurement program (\$-2,311.5 million) and support (\$-194.1 million). These decreases were partially offset by revised escalation rates (\$+195.9 million).

FMTV (Family of Medium Tactical Vehicles) - Program costs increased \$7,524.5 million (+87.8%) from \$8,568.6 million to \$16,093.1 million, due primarily to the extension of the Wheeled Vehicle Modernization development and procurement program from 15 to 30 years and increases in truck quantity from 79,157 to 102,322 (\$+4,269.5 million). Other increases included additional support associated with the extended program (\$+704.8 million), schedule impacts due to model mix changes and trucks purchased in the later years (\$+1,480.2 million), and revised escalation rates (\$+1,297.9 million). These increases were partially offset by a decrease in trailer quantity from 39,778 to 17,220 (\$-372.7 million).

M1 TANK - Program costs decreased \$-5,978.2 million (-22.6%) from \$26,401.3 million to \$20,423.1 million, due to the decrease of 1,515 tanks from 9,317 to 7,802 (\$-6,025.1 million, including reduced support costs of \$-1,069.3 million and Block II engineering design changes of \$-691.0 million associated with

the decreased buy). Other decreases included rescheduling of 69 tanks from FY 1991-92 to FY 1988 and FY 1990 funded delivery periods (\$-41.9 million) and revised economic rates (\$-1,047.3 million). These decreases were partially offset by revised cost estimates (\$+1,032.6 million) and increased Block II development requirements (\$+103.5 million).

OH-58D (AHIP (Army Helicopter Improvement Program)) - Program costs increased \$865.0 million (+58.8%) from \$1,471.6 million to \$2,336.6 million, due in part to an increase of 36 aircraft from 207 to 243 (\$+138.0 million, including associated estimating changes of \$+23.1 million and support costs of \$+10.7 million applicable to the increase in aircraft since the baseline). Other increases included engineering changes to the armed OH-58D and Multi-Purpose Light Helicopter (\$+540.4 million), and increased support changes and depot facilitization requirements (\$+180.3 million).

SINCGARS (Single Channel Ground and Airborne Radio System) - Program costs increased \$695.7 million (+11.9%) from \$5,831.6 million to \$6,527.3 million, due primarily to revised escalation rates (\$+592.5 million) and the rescheduling of production quantities to later years (\$+93.0 million).

UH-60A/L - Program costs increased \$7,720.8 million (+91.4%) from \$8,451.3 million to \$16,172.1 million, due primarily to the extension of the procurement objective from 1327 to 2257 aircraft (\$+7,946.1 million, including associated estimating changes of \$+4,040.5 million and support costs of \$+301.6 million applicable to the increased quantity since the baseline was established). These increases were partially offset by termination of the Multi-Stage Improvement Program (\$-203.6 million).

**Navy:**

AOE 6 - Program costs increased \$352.5 million (+12.4%) from \$2,834.8 million to \$3,187.3 million, due primarily to the application of revised escalation rates (\$+120.8 million) and revised estimates based on prior year buys (\$+227.2 million).

CV HELO (SH-60F) - Program costs increased \$382.1 million (+12.3%) from \$3,118.6 million to \$3,500.7 million, due to the application of revised escalation rates (\$+200.4 million), the development and integration of an airborne low frequency sonar (\$+86.1 million), a revised procurement buy schedule (\$+39.0 million), a delay in the procurement of support items and an increase in spare parts funding (\$+39.0 million), and an increase in negotiated contract overhead rates (\$+17.6 million).

DDG 51 - Program costs increased \$4,010.0 million (+14.8%) from \$27,057.4 million to \$31,067.4 million, due primarily to a quantity increase of 5 ships from 33 to 38 (\$+4,382.2 million) and the application of revised escalation rates (\$+1,147.5 million). These increases were partially offset by savings from large lot procurement and revised ship systems estimates (\$-1,495.6 million).

E-2C - Program costs increased \$1,707.1 million (+23.1%) from \$7,403.8 million to \$9,110.9 million, due primarily to an increase of 12 aircraft (\$+678.0 million), a stretchout of the buy schedule for FYs 1991-94 (\$+224.4 million), revised aircraft and GFE estimates (\$+306.4 million), revised support cost estimates (\$+338.7 million), and the application of revised escalation rates (\$+129.1 million).

EA-6B - Program costs increased \$2,694.5 million (+51.4%) from \$5,239.8 million to \$7,934.3 million, due primarily to an increase of 69 aircraft (\$+1,511.2 million), revised cost estimates (\$+280.2 million), increased support costs associated with additional aircraft (\$+793.9 million), and the application of revised escalation rates (\$+140.5 million).

FDS (Fixed Distributed System) - Program costs increased \$6,937.7 million (+758.5%) from \$914.7 million to \$7,852.4 million, due primarily to revised development estimates (\$+487.2 million), and the addition of procurement (\$+6,135.1 million) and MILCON (\$+108.1 million) following the Milestone II decision in September 1989. In accordance with Title 10, USC, Section 2432, the Department was not required to report procurement and MILCON costs until after the Milestone II decision. The initial procurement and MILCON estimates are added directly to the SAR baseline, and are not reported as cost variances.

HARPOON - Program costs decreased \$730.5 million (-16.5%) from \$4,439.5 million to \$3,709.0 million, due primarily to a quantity decrease of 631 missiles from 4,449 to 3,818 (\$-632.1 million), revised estimates for the Standoff Land Attack Missile

(SLAM) (\$-253.8 million), and reduced support requirements caused by the quantity decrease (\$-112.5 million). These decreases were partially offset by a revised procurement buy schedule (\$+197.1 million), and the application of revised escalation rates (\$+64.1 million). Other changes reflect categorization corrections to prior year SARs.

NATO AAWS (Anti-Air Warfare System) - Program costs increased \$149.3 million (+158.7%) from \$94.1 million to \$243.3 million, due primarily to the addition of estimates for the demonstration and validation phase (\$147.2 million).

SEA LANCE - Program costs decreased \$2,744.4 million (-82.1%) from \$3,344.0 million to \$599.6 million, due to the decision to terminate the program and delete all funding for FY 1991 and beyond.

SLAT (Supersonic Low Altitude Target) - Program costs decreased \$52.6 million (-14.3%) from \$367.8 million to \$315.2 million, due primarily to a quantity reduction of 14 targets from 59 to 45 (\$-36.5 million) and revised estimates due to program restructuring (\$-82.3 million). These decreases were partially offset by a schedule slip in the low rate production decision (\$+43.8 million) and guidance and control design changes (\$+24.3 million), both of which also resulted from restructuring the program.

SSN 21 - Program costs decreased \$3,924.4 million (-19.7%) from \$19,901.6 million to \$15,977.2 million, due primarily to a quantity decrease of 3 submarines from 12 to 9 (\$-4,809.8 million). This decrease is partially offset by the application of revised escalation rates (\$+1024.2 million).

**Air Force:**

AMRAAM (Advanced Medium Range Air-to-Air Missile) - Program costs increased \$3,293.0 million (+28.4%) from \$11,592.4 million to \$14,885.4 million, due primarily to increased estimates resulting from changes in costing methodology to reflect flatter learning curves and reduced competition savings assumptions (\$+2,351.6 million). Other increases included the application of revised escalation rates (\$+628.2 million) and the withdrawal of the multiyear procurement initiative (\$+195.3 million).

C-17A - Program costs increased \$4,357.3 million (+11.6%) from \$37,454.6 million to \$41,811.9 million, due primarily to the application of revised escalation rates (\$+2,874.3 million), and estimating changes (\$+919.4 million) and schedule changes (\$+512.1 million) applicable to a stretchout of the program because of a slower build-up rate.

IR MAVERICK - Program costs decreased \$383.5 million (-12.0%) from \$3,200.1 million to \$2,816.6 million, due primarily to a reduction in quantity of 3,763 missiles from 23,496 to 19,733 (\$-374.5 million, including associated schedule changes of \$-47.5 million and estimating changes of \$-38.7 million applicable to the 3,763 missiles since the baseline was established), and reduced estimates from the incorporation of competitive price data (\$-29.8 million). These decreases were partially offset by the application of revised escalation rates (\$+25.9 million).

MARK XV IFF (Identification Friend From Foe) - Program costs decreased \$4,091.2 million (-93.2%) from \$4,391.6 million to \$300.4 million, due to termination of the program. Subsequent to submission of the President's budget, the Secretary of Defense restored the program. The restored program will be reflected in the next SAR.

NAVSTAR GPS/UE (Global Positioning System/User Equipment) - Program costs increased \$1,964.6 million (+24.1%) from \$8,170.4 million to \$10,135.0 million, due to an increase in both the satellite and user equipment portions of the program. Satellite increases were due primarily to the application of revised escalation rates (\$+148.0 million), addition of 6 satellites (\$+147.9 million, including estimating changes of \$+33.5 million associated with the 6 new satellites), and additional years funding for support of Block IIR satellites (\$+192.2 million). User Equipment increases reflected the application of revised escalation rates (\$+282.8 million), additions in user equipment quantities (\$+215.9 million) and associated increased support (\$+264.0 million), user equipment schedule stretchouts (\$+215.1 million), and funding for Navy installation material (\$+438.1 million).

PEACEKEEPER - Program costs decreased \$3,897.9 million (-16.6%) from \$23,492.1 million to \$19,594.2 million, due primarily to a reduction in quantity of 62 missiles from 255 to 193 missiles (\$-3,011.7 million) and associated support changes (\$-441.0 million). These decreases were partially offset by the application of revised escalation rates (\$+235.8 million).

SFW (Sensor Fuzed Weapon) - Program costs increased \$667.6 million (+20.8%) from \$3,210.8 million to \$3,878.4 million, due primarily to the application of revised escalation rates (\$+332.9 million), increased estimates due to changes in acquisition strategy reflected in the restructured program (program competition delayed) (\$+208.6 million), and a schedule slip of the first year buy from FY 1991 to FY 1992 (\$+101.8 million).

SMALL ICBM - Program costs increased \$1,890.0 million (+35.1%) from \$5,385.1 million to \$7,275.1 million, due primarily to missile and basing development restart activities to support an FY 1997 IOC (\$+1,343.2 million). Additional increases resulted from a quantity increase of 6 RDT&E units (\$+457.9 million) and the application of revised escalation rates (\$+87.4 million).

TACIT RAINBOW - Program costs increased \$835.9 million (+25.4%) from \$3,287.9 million to \$4,123.8 million, due primarily to the application of revised escalation rates (\$+340.0 million) and an increase in the air vehicle estimate resulting from an independent analysis (\$+271.3 million).

TITAN IV - Program costs increased \$4,807.8 million (+39.4%) from \$12,201.3 million to \$17,009.1 million, due primarily to the addition of 18 replenishment vehicles (\$+3,248.4 million), payload integration of additional missions (\$+705.3 million), the application of revised escalation rates (\$+453.2 million), production hardware changes due to vehicle configuration changes (\$+235.8 million), design of modernized aviation ground equipment at Cape Canaveral to support increased program scope and duration (\$+145.0 million), and a second west coast launch pad modification to change from a Shuttle to a Titan IV capability at Vandenberg AFB (\$+127.9 million).

**Program Acquisition Cost Summary (Dollars in Millions)**

**As of Date: December 31, 1989**

Weapon System	Base Year	Type of Baseline	Baseline Estimate				Changes To Date			Current Estimate			Percent Cost Growth To Date	
			Cost		Quantity	Cost		Quantity	Cost		Quantity	Base Year Adj For Qty	Total Adj For Qty	
			Base Year \$	Current Year \$		Base Year \$	Current Year \$		Base Year \$	Current Year \$				
Army:														
AAWS-M	90	DE	3398.8	3936.5	70864.0	-18.3	223.4	-	3380.5	4159.9	70864.0	-0.5	5.7	
ADDS	83	PE	1981.5	3038.2	88.0	95.5	119.8	35.0	2077.0	3158.0	123.0	0.9	-2.1	
AH-64 (APACHE)	72	DE	1892.4	3789.8	545.0	2046.3	7998.8	271.0	3938.7	11788.6	816.0	62.4	126.4	
ATACMS	87	DE	1135.9	1222.3	1050.0	636.9	959.1	1834.0	1772.8	2181.4	2884.0	-6.0	-1.7	
BRADLEY FVS	72	DE	325.6	436.9	1205.0	3579.1	12143.6	7627.0	3904.7	12580.5	8832.0	140.1	158.8	
CH-47D (CHINOOK)	75	DE	882.5	1562.8	364.0	491.8	1726.2	111.0	1374.3	3289.0	475.0	23.9	42.3	
FAAD C2I	87	DE	1640.6	1863.7	-	83.4	360.2	-	1724.0	2223.9	-	5.1	19.3	
FAADS LOS-F-H	89	DE	5051.3	6025.7	566.0	37.3	809.5	-	5088.6	6835.2	566.0	0.7	13.4	
FAADS LOS-R	89	PdE	1103.1	1266.7	1207.0	-36.2	22.2	-	1066.9	1288.9	1207.0	-3.3	1.8	
FAADS NLOS	89	DE	2519.7	2920.4	411.0	-1928.6	-2289.6	-400.0	591.1	630.8	11.0	-20.3	0.4	
FHTV (PLS)	89	DE	1704.3	1996.9	4360.0	-32.7	110.4	-	1671.6	2107.3	4360.0	-1.9	5.5	
FMTV	89	DE	6625.3	8568.6	118995.0	1618.5	7524.5	694.0	8243.8	16093.1	119689.0	3.2	27.7	
HELLFIRE	75	DE	488.6	703.4	24841.0	604.6	1988.7	32208.0	1093.2	2692.1	57049.0	46.8	79.4	
LHX	84	PE	1756.2	2133.0	-	1078.5	1680.1	6.0	2834.7	3813.1	6.0	61.4	78.8	
M1 TANK	89	DE	6732.5	4779.4	3325.0	16237.6	15643.7	4477.0	22970.1	20423.1	7802.0	48.2	59.1	
MLRS	78	PE	2232.3	3454.0	183.0	783.1	2874.3	667.0	3015.4	6328.3	850.0	-4.7	11.8	
MLRS-TGW	84	PE	190.7	211.2	-	52.6	76.4	-	243.3	287.6	-	27.6	36.2	
MSE	86	PdE	4428.5	5134.0	48.0	-880.1	-824.8	-	3548.4	4309.2	48.0	-21.1	-17.4	
OH-58D (AHIP)	82	DE	1667.9	2531.6	583.0	5.8	-195.0	-335.0	1673.7	2336.6	248.0	65.0	48.6	
PATRIOT	72	DE	4267.4	5240.5	240.0	642.1	7149.1	-132.0	4909.5	12389.6	108.0	55.0	180.1	
SADM	89	DE	1605.7	1786.8	11068.0	3418.8	4984.5	112340.0	5024.5	6771.3	123408.0	-0.3	10.3	
SINCgars	84	PdE	4167.7	5611.7	29215.0	-8.0	915.6	72010.0	4159.7	6527.3	364925.0	-15.7	-4.6	
STINGER RMP	83	PdE	2267.6	2961.2	36034.0	-393.0	-272.9	23034.0	1874.6	2688.3	59068.0	-31.3	-30.5	
TOW 2	84	PdE	2302.1	2623.8	141337.0	681.9	878.5	33308.0	2984.0	3502.3	174645.0	11.1	11.7	
UH-60A/L(BLACKHAWK)	71	DE	1942.0	2307.3	1123.0	2348.7	13864.8	1144.0	4290.7	16172.1	2267.0	55.2	147.6	
Subtotal			-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
			62310.2	76106.4	31145.6	78471.1	-	93455.8	154577.5	-	18.4	45.5	-	
Navy:														
AN/BSV-1	84	PE	2972.4	3827.6	-	-1545.0	-2233.6	-	1427.4	1594.0	-	-52.4	-58.9	
AN/BSY-2	88	DE	2536.5	2855.8	2.0	24.4	148.9	-	2560.9	3004.7	2.0	1.5	5.8	
AN/SQ-89	85	PdE	4663.8	5100.3	120.0	162.0	609.4	-10.0	4825.8	5709.7	110.0	16.3	26.9	
AOE 6	86	PdE	2332.5	2834.8	7.0	179.5	352.5	-	2512.0	3187.3	7.0	7.7	12.4	
ASPJ	84	DE	227.7	236.4	12.0	299.3	325.2	-	527.0	561.6	12.0	131.4	137.6	
AV-8B	79	DE	5740.6	9125.5	342.0	-934.1	-762.1	-60.0	4806.5	8363.4	282.0	-6.9	9.3	
C/MH-53E	73	DE	464.4	578.4	-	2008.9	7114.1	-	2473.3	7692.5	-	20.0	21.9	
CG 47 AEGIS	78	PdE	9013.7	14083.5	16.0	5008.5	9407.6	11.0	14022.2	23491.1	27.0	-3.3	-9.0	
CV HELO (SH-60F)	88	PdE	2691.8	3173.8	-	77.7	326.9	-	2769.5	3500.7	-	2.9	10.3	
CVN-72/73	82	DE	5265.5	7418.9	2.0	26.1	-1152.7	-	5291.6	6266.2	2.0	0.5	-15.5	
CVN-74/75	88	DE	5911.0	6966.0	2.0	-210.3	-602.1	-	5700.7	6363.9	2.0	-3.6	-8.6	
DDG 51	87	PdE	16953.7	20117.5	23.0	6975.9	10949.9	15.0	23929.6	31067.4	38.0	-9.3	-4.4	
E-2C	85	PdE	5398.0	5921.5	-	2284.7	3189.4	-	7682.7	9110.9	-	10.8	14.1	
E-6A (TACAMO)	82	DE	1584.7	2251.7	15.0	-82.1	-254.6	1.0	1502.6	1997.1	16.0	-7.6	-13.7	
EA-6B	84	PdE	2239.6	2747.8	-	3670.6	5186.5	-	5910.2	7934.3	-	12.9	14.8	
F-14D	89	PdE	21543.5	25021.9	-	-3021.8	-1967.6	-	18521.7	23054.3	-	-0.3	8.3	
F/A-18	75	DE	8016.6	12875.3	-	6517.7	26672.6	-	14534.3	39547.9	-	48.5	157.7	
FDS	86	PE *	4352.0	7020.2	1.0	562.0	832.2	11.0	4914.0	7852.4	12.0	12.9	11.9	
HARM	78	DE	1681.8	2409.9	13853.0	1682.5	4692.8	8903.0	3364.3	7102.7	22756.0	40.3	73.1	
HARPOON	70	DE	795.0	1031.8	2922.0	726.4	2677.2	896.0	1521.4	3709.0	3818.0	97.8	297.5	
LAMPS MK III	76	DE	2396.7	3907.6	209.0	414.2	2264.3	-	2810.9	6171.9	209.0	23.5	67.8	
LCAC	82	PdE	1103.3	1610.7	60.0	1084.0	1249.4	47.0	2187.3	2860.1	107.0	13.5	-0.9	
LHD 1	82	DE	2931.8	4451.0	3.0	1797.3	1634.9	3.0	4729.1	6085.9	6.0	-13.4	-28.0	
LSD 41	81	PdE	3223.9	4849.9	12.0	-1172.2	-2394.6	-4.0	2051.7	2455.3	8.0	-10.6	-27.2	
LSD 41 CV	88	DE	1350.7	1584.0	5.0	6.2	111.1	1.0	1356.9	1695.1	6.0	-13.3	-8.5	
MCM 1	82	PdE	1466.3	1737.4	14.0	10.5	20.0	-	1476.8	1757.4	14.0	0.7	1.2	
MK-48 ADCAP	89	PdE	6347.7	6800.3	-	94.8	615.1	-	6442.5	7415.4	-	1.5	9.1	
MK-50 TORPEDO	79	DE	4735.7	6653.7	-	567.0	637.5	-	5302.7	7291.2	-	11.1	8.8	
NATO AAWS	88	PE	83.2	94.1	-	117.4	149.3	-	200.6	243.4	-	141.1	158.7	
P-3C	84	PdE	3735.9	5023.6	80.0	-2417.0	-3582.1	-48.0	1318.9	1441.5	32.0	-40.9	-53.9	
P-7A (LRAACA)	89	DE	6562.7	7889.8	125.0	-167.0	583.1	-	6395.7	8472.9	125.0	-2.5	7.4	
PHALANX CIWS	84	PdE	2176.2	2481.7	620.0	738.7	482.3	93.0	291					

**Program Acquisition Cost Summary (Dollars in Millions)**

**As of Date: December 31, 1989**

Weapon System	Base Year	Type of Baseline	Baseline Estimate			Changes To Date			Current Estimate			Percent Cost Growth To Date	
			Cost		Quantity	Cost		Quantity	Cost		Quantity	Base Year Adj For Qty	Total Adj For Qty
			Base Year \$	Current Year \$		Base Year \$	Current Year \$		Base Year \$	Current Year \$			
UHF FOLLOW-ON V-22	88	PdE	1322.0	1531.1	10.0	-45.3	4.2	-	1276.7	1535.3	10.0	-3.4	0.3
	86	DE	23073.0	29662.3	919.0	-20617.4	-27022.8	-919.0	2455.6	2639.5	-	-66.7	-70.8
Subtotal			241436.9	311669.9		17252.7	76407.3		258689.6	388077.2		-1.3	4.6
Air Force:													
AMRAAM	78	DE	4761.8	11591.6	24504.0	1508.0	3293.8	-73.0	6269.8	14885.4	24431.0	32.2	28.9
ATARS	85	DE	974.8	1292.5	569.0	-815.0	-1102.7	-560.0	159.8	189.8	9.0	-2.4	-10.1
ATF	85	PE	11785.5	15294.0	12.0	-939.3	-942.4	-3.0	10846.2	14351.6	9.0	-5.0	-3.2
B-1B	81	DE	20500.0	29537.6	100.0	-217.0	-2092.9	-	20283.0	27444.7	100.0	-1.1	-7.1
C-17A	81	PE	19544.6	39753.8	211.0	2850.7	2058.1	-	22395.3	41811.9	211.0	14.6	5.2
DMSP	75	PdE	718.7	1879.0	9.0	-22.7	-107.5	1.0	696.0	1771.5	10.0	-10.8	-14.4
DSCS III	77	DE	631.1	893.6	14.0	424.1	1122.4	1.0	1055.2	2016.0	15.0	61.7	112.5
DSP	78	DE	4424.6	5547.6	19.0	1239.0	2766.5	6.0	5663.6	8314.1	25.0	3.8	6.4
F-15	70	DE	5991.0	7355.2	749.0	5563.0	22782.7	345.0	11554.0	30137.9	1094.0	31.1	54.3
F-16	75	DE	4376.8	6054.5	658.0	15814.3	46987.2	2349.0	20191.1	53041.7	3007.0	62.4	83.4
IR MAVERICK(AGM-65)	75	DE	995.1	1592.9	31113.0	180.9	1223.7	-11347.0	1176.0	2816.6	19766.0	74.3	402.1
IUS (SPACE SHUTTLE)	75	DE	963.0	2012.3	18.0	-127.3	-334.1	-7.0	835.7	1678.2	11.0	6.4	10.2
JSTARS	83	DE	5660.4	8033.5	136.0	-314.5	176.9	1.0	5345.9	8210.4	137.0	-5.6	2.2
JTIDS	81	DE	309.0	382.5	55.0	987.0	1434.7	113.0	1296.0	1817.2	168.0	58.4	61.8
KC-135R	81	PdE	5229.1	7829.2	334.0	1951.1	4504.7	299.0	7180.2	12333.9	633.0	-14.6	-10.5
LANTIRN	80	DE	2102.1	3823.2	1328.0	174.7	-21.9	-249.0	2276.8	3801.3	1079.0	16.1	6.8
MARK XV IFF (CIS)	82	DE	2783.9	4391.6	15887.0	-2534.0	-4091.2	-15887.0	249.9	300.4	-	-91.0	-93.2
NAVSTAR GPS	79	DE	1599.4	2306.7	40.0	803.0	2059.8	26.0	2402.4	4366.5	66.0	18.7	33.7
NAVSTAR USER EQMT	79	DE	2554.9	4875.8	27339.0	243.1	892.7	27533.0	2798.0	5768.5	54872.0	9.3	15.1
OTH-B	82	DE	1145.3	1419.4	8.0	382.5	571.0	1.0	1527.8	1990.4	9.0	13.6	16.7
PEACEKEEPER	82	DE	16634.9	21680.2	243.0	-1720.7	-2086.0	-50.0	14914.2	19594.2	193.0	-1.4	2.9
RAIL GARRISON	82	DE	4678.2	6826.8	50.0	-35.8	301.5	-	4642.4	7128.3	50.0	-0.8	4.4
SFW	79	DE	1219.8	2405.8	14084.0	444.7	1472.6	5874.0	1664.5	3878.4	19958.0	6.4	22.6
SMALL ICBM	84	DE	33711.0	44727.9	645.0	-27985.6	-37452.8	-629.0	5725.4	7275.1	16.0	-77.1	-77.7
SRAM II	83	DE	1720.5	2393.4	1633.0	-137.8	-90.2	-	1582.7	2303.2	1633.0	-8.0	-3.8
TACIT RAINBOW	85	DE	2786.5	3654.0	-	-60.2	469.8	-	2726.3	4123.8	-	19.2	39.8
TITAN IV	85	DE	2150.5	2529.2	10.0	10469.8	14479.9	65.0	12620.3	17009.1	75.0	33.1	34.9
TRI-TAC	76	PdE	1014.2	2075.5	359.0	-338.9	-732.7	66.0	675.3	1342.8	425.0	-31.3	-34.8
WAM (WIS)	82	DE	1427.0	1857.0	35.0	-316.7	-366.4	-35.0	1110.3	1490.6	-	-22.2	-19.7
Subtotal			162393.7	244016.3		7470.4	57177.2		169864.1	301193.5		-2.2	7.0
Grand Total			466140.8	631792.6		55868.7	212055.6		522009.5	843848.2		1.4	11.2

**Distribution of Cost Changes (Base-Year Constant Dollars)**  
As of Date: December 31, 1989

Weapon System	Base Year	Cost Changes Between the Baseline and Current Estimate (Base-Year Constant Dollars)															
		Quantity		Schedule		Engineering		Estimating		Other		Support		Total			
		This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date
<b>Army:</b>																	
AAWS-M	90	-	-	77.9	-	26.0	19.2	-271.9	8.0	424.2	-	-	0.2	0.2	-18.3	-18.3	-18.3
ADDS	83	-	532.7	-	140.8	-	90.0	-38.3	884.5	-	-	-36.1	398.3	-74.4	2046.3	95.5	
AH-64 (APACHE)	72	370.7	750.9	-0.1	-0.1	-	-	-11.3	-113.9	-	-	-	-	359.3	636.9		
ATACMS	87	66.7	1300.9	-	78.2	24.7	756.5	-13.1	1013.6	-	11.0	4.1	418.9	82.4	3579.1		
BRADLEY FVS	72	-	226.3	-	41.4	-	-	-18.5	180.7	-	-	-11.2	43.4	-29.7	491.8		
CH-47D (CHINOOK)	75	-	-	-	-34.3	-	-	176.8	117.7	-	-	-	-	176.8	83.4		
FAAD C2I	87	-	-	-	59.3	-	-	-29.9	-7.4	-	-	-14.6	-14.6	-44.5	37.3		
FAADS LOS-F-H	89	-	-	-	-	-	-	-72.5	-72.5	-	-	36.3	36.3	-36.2	-36.2		
FAADS LOS-R	89	-	-	-	-	-	-	-	-	-	-	-150.6	-150.6	-1928.6	-1928.6		
FAADS NLOS	89	-1778.0	-1778.0	-	-	-	-	-0.9	-0.9	-	-	-31.8	-31.8	-32.7	-32.7		
FHTV (PLS)	89	1366.1	1366.1	21.4	21.4	-	-	3.2	3.2	-	-	227.8	227.8	1618.5	1618.5		
FMTV	75	-	256.0	-48.2	35.7	-	232.6	35.9	76.6	-	-	-5.1	3.7	-17.4	604.6		
HELLFIRE	84	-	-	-	-	-	-	27.6	1078.5	-	-	-	-	27.6	1078.5		
LHX	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
M1 TANK	89	-3449.1	8769.5	-88.1	103.3	-476.8	1485.2	1176.8	6216.1	-	-	-825.4	-336.5	-3662.6	16237.6		
MLRS	78	68.5	932.5	-	-27.5	-	-	-31.9	-137.5	-	10.0	-10.4	5.6	26.2	783.1		
MLRS-TGW	84	-	-	-	-5.6	-	1.3	-15.3	56.9	-	-	-	-	-15.3	52.6		
MSE	86	-	69.3	-	-	-	-	-257.9	-949.4	-	-	-	-	-257.9	-880.1		
OH-58D (AHIP)	82	68.1	-653.5	-	73.0	325.6	409.6	15.5	310.7	-	24.5	114.6	-134.0	523.8	5.8		
PATRIOT	72	-	-1100.2	-	674.7	-	-290.2	4.3	846.6	-	-	486.7	4.3	642.1			
SADARM	89	-14.4	3433.4	-7.7	5.1	-	-	-45.5	-19.7	-	-	-	-	-67.6	3418.8		
SINCgars	84	-	763.9	23.6	43.9	-	13.8	-74.1	-460.3	-	-	19.7	-369.3	-30.8	-8.0		
STINGER RMP	83	17.3	462.5	-	148.8	-	3.7	-57.7	-1003.2	-	-	-4.8	-4.8	-45.2	-393.0		
TOW 2	84	-	383.4	-	33.8	177.4	430.2	-14.5	-144.5	-	-	-	-21.0	162.9	681.9		
UH-60A/L(BLACKHAWK)	71	670.7	822.1	-	-99.1	-56.3	55.2	701.4	1504.5	-	13.4	43.8	52.6	1359.6	2348.7		
<b>Subtotal</b>		-2613.4	16615.7	-99.1	1318.8	55.1	2957.3	1408.3	9744.7	-	58.9	-643.5	450.2	-1892.6	31145.6		
<b>Navy:</b>																	
AN/BSV-1	84	-	25.1	-	25.6	-	67.0	36.1	-54.3	-	-1918.0	-	309.6	36.1	-1545.0		
AN/BSY-2	88	-	-13.9	-	-	45.4	117.9	13.4	-37.5	-	-	-44.4	-42.1	14.4	24.4		
AN/SQQ-89	85	-12.4	-515.9	43.3	170.2	-	220.4	145.3	290.9	-	-	10.7	-3.6	186.9	162.0		
AOE 6	86	-	-	0.9	0.9	-	-	178.6	178.6	-	-	-	-	179.5	179.5		
ASPJ	84	-	-	-	21.8	-	40.8	-34.4	236.7	-	-	-	-	-34.4	299.3		
AV-8B	79	-	-580.5	-	714.2	-	346.2	-19.0	-1541.1	-	-	30.8	127.1	11.8	-934.1		
C/MH-53E	73	-72.8	1596.0	-88.0	17.3	16.8	189.9	126.8	-69.2	-	2.4	-129.6	272.5	-146.8	2008.9		
CG 47 AEGIS	78	-	5491.4	-	-2.6	-	593.6	-308.2	-1284.8	-	-	-11.0	210.9	-319.2	5008.5		
CV HELO (SH-60F)	88	-	-	-9.0	-6.6	71.7	105.4	13.0	23.8	-	-	22.0	-44.9	97.7	77.7		
CVN-72/73	82	-	-	-	-	-	-	-43.9	37.8	-	-	-4.1	-11.7	-48.0	26.1		
CVN-74/75	88	-	-	-	-124.1	-	-	-110.2	-201.2	-	-	-4.9	115.0	-115.1	-210.3		
DDG 51	87	3143.4	9427.8	-	-	-	-	-1430.7	-2693.2	-	-	48.8	241.3	1761.5	6975.9		
E-2C	85	422.6	1535.3	116.7	130.0	20.6	95.6	209.3	243.6	-	-	220.1	280.2	989.3	2284.7		
E-6A (TACAMO)	82	-	41.1	-	-5.3	-	-9.5	-3.5	42.1	-	-	12.6	-150.5	9.1	-82.1		
EA-6B	84	938.1	2995.3	-	242.2	-	0.4	165.9	-659.5	-	-	489.4	1092.2	1593.4	3670.6		
F-14D	89	853.4	-2966.4	-244.8	-677.4	293.3	293.3	534.6	1543.7	-	-	-1075.5	-1215.0	361.0	-3021.8		
F/A-18	75	-	1768.1	88.5	869.7	-	889.3	88.0	1888.2	-	4.5	111.6	1097.9	288.1	6517.7		
FDS	86	-	-	-	-	81.5	131.2	300.6	321.3	-	-	70.2	109.5	452.3	562.0		
HARM	78	51.7	715.7	11.5	616.2	-	156.0	-43.8	141.7	-	-	7.3	52.9	26.7	1682.5		
HARPOON	70	-343.0	-25.9	-11.4	77.6	30.1	56.0	175.6	481.7	-	-	-49.8	137.0	-198.5	726.4		
LAMPS MK III	76	-	-119.8	-	208.7	-	126.6	22.4	226.1	-	-	4.1	-27.4	26.5	414.2		
LCAC	82	24.0	823.5	-1.2	-1.2	-	2.2	-84.6	195.1	-	-	-	64.4	-61.8	1084.0		
LHD 1	82	-	2528.9	10.8	-157.2	46.5	46.5	-130.9	-693.1	-	-	-3.0	72.2	-76.6	1797.3		
LSD 41	81	-	928.5	-	-	-5.0	-	-26.2	-247.0	-	-	-7.1	-64.5	-11.3	-1172.2		
LSD 41 CV	88	-	214.9	-	31.9	-	-	-	-	-	-	0.8	6.4	-25.4	6.2		
MCM 1	82	-	-	-	-	-	-	19.7	19.7	-	-	-9.2	-9.2	10.5	10.5		
MK-48 ADCAP	89	-	-	187.1	187.1	-	-	-93.4	-93.4	-	-	1.1	1.1	94.8	94.8		
MK-50 TORPEDO	79	-	37.8	1.7	547.6	-	28.1	52.3	4.5	-	-	-51.0	54.0	567.0			
NATO AAWS	88	-	-	-	-	-	-	117.4	117.4	-	-	-	-	117.4	117.4		
P-3C	84	-	-1505.7	-	242.3	-	-	-841.8	-	-	-	-0.3	-311.8	-0.3	-2417.0		
P-7A (LRAACA)	89	-	-	-	-	-	-	-166.7	-166.7	-	-	-0.3	-0.3	-167.0	-167.0		
PHALANX CIWS	84	-89.5	269.6	-17.2	-17.5	-	147.3	19.4	282.8	-	-	-17.8	56.5	-105.1	738.7		
PHOENIX (AIM-54C)	77	-	1313.6	-	94.1												

**Distribution of Cost Changes (Base-Year Constant Dollars)**  
As of Date: December 31, 1989

Weapon System	Base Year	Cost Changes Between the Baseline and Current Estimate (Base-Year Constant Dollars)													
		Quantity		Schedule		Engineering		Estimating		Other		Support		Total	
		This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date
UHF FOLLOW-ON	88	-	-	2.9	2.9	-	-	-48.2	-48.2	-	-	-	-	-45.3	-45.3
V-22	86	-	-15699.7	-	-	-	-	202.8	58.3	-	-	-	-	202.8	-20617.4
Subtotal		-166.5	20677.6	-290.2	2648.8	636.2	6198.4	-912.1	-8174.8	-707.5	-2320.1	-763.5	-1777.2	-2203.6	17252.7
Air Force:															
AMRAAM	78	-	-18.7	-	-158.2	-	162.8	948.8	1807.5	-	-	8.5	-285.4	957.3	1508.0
ATARS	85	-	-811.0	-	-	-	17.8	-8.3	-3.5	-	-11.9	-6.4	-6.4	-14.7	-815.0
ATF	85	-	-369.0	-	-	-	-82.5	106.3	-706.4	-	-	-	218.6	106.3	-939.3
B-1B	81	-	-	-13.2	-13.2	-	287.8	-57.8	-135.0	-	-	50.8	-356.6	-20.2	-217.0
C-17A	81	-	-	-	186.6	-	222.0	690.1	1792.3	-	-	-249.9	649.8	440.2	2850.7
DMSP	75	-	61.2	-	-	-6.4	-30.0	-9.3	-62.9	-	-	-15.1	9.0	-30.8	-22.7
DSCS III	77	-	21.3	-	52.6	-9.7	251.3	5.6	60.5	-	38.4	-	-	-4.1	424.1
DSP	78	-177.7	1033.8	-	-	-	-	115.2	-93.3	-	-	-12.9	298.5	-75.4	1239.0
F-15	70	-	2819.8	-	221.6	-17.5	827.9	-8.1	19.5	-	619.1	-108.0	1055.1	-133.6	5563.0
F-16	75	-	8053.1	-	365.7	-666.7	5490.0	-130.7	-1782.6	-	40.1	-123.9	3648.0	-921.3	15814.3
IR MAVERICK(AGM-65)	75	-90.1	-320.3	-16.2	264.3	-0.6	8.1	-32.5	185.6	-	-	4.1	43.2	-135.3	180.9
IUS (SPACE SHUTTLE)	75	-	-177.8	-	-	-	41.6	6.9	10.5	-	-	2.3	-1.6	9.2	-127.3
JSTARS	83	-	-	-	-	-	-	-209.8	-292.2	-	-	-4.1	-22.3	-213.9	-314.5
JTIDS	81	6.7	509.1	-	-1.5	-	243.8	-69.4	197.0	-	-	-	38.6	-62.7	987.0
KC-135R	81	-44.5	3179.5	-	-	-	-	-510.3	-1346.1	-	-	86.0	117.7	-468.8	1951.1
LANTIRN	80	-123.0	-140.8	8.0	27.8	-0.8	-30.1	-47.0	233.4	-	-	10.3	84.4	-152.5	174.7
MARK XV IFF (CIS)	82	-	-	-	-	-	-	-1584.5	-1584.5	-466.3	-466.3	-483.2	-483.2	-2534.0	-2534.0
NAVSTAR GPS	79	48.6	424.6	-	4.5	-	388.4	-69.5	-235.1	-	-	64.0	220.6	43.1	803.0
NAVSTAR USER EQMT	79	39.6	4.6	39.3	39.3	-	-24.8	378.8	361.0	-	-	88.3	-137.0	546.0	243.1
OTH-B	82	-92.4	199.1	-	6.1	-	129.5	80.3	56.5	-	-	-8.1	-8.7	-20.2	382.5
PEACEKEEPER	82	-1749.7	-1513.3	-	17.6	-286.5	-359.0	-29.1	1504.7	-	-	-375.6	-1370.7	-2440.9	-1720.7
RAIL GARRISON	82	-	-	-	-	194.8	194.8	-189.7	-189.7	-	-	-40.9	-40.9	-35.8	-35.8
SFW	79	-	344.2	-	-	-	-	94.4	96.0	-	-	-	-	95.5	444.7
SMALL ICBM	84	300.0	-8744.4	-	-	-	-	1.4	132.3	875.2	-6210.7	-	-13162.8	1176.6	-27985.6
SRAM II	83	-	-	-	-	-	119.1	-98.5	-190.2	-	-	-44.2	-66.7	-142.7	-137.8
TACIT RAINBOW	85	166.6	-499.9	-	28.3	-	128.0	58.5	427.6	-	-	91.0	-144.2	316.1	-60.2
TITAN IV	85	2030.4	7332.0	-	-	-558.7	-1332.3	994.0	3685.8	-	-	257.7	784.3	2723.4	10469.8
TRI-TAC	76	-21.4	-31.1	-	-	-3.9	3.3	-36.3	-256.9	-	-	-7.0	-54.2	-68.6	-338.9
WAM (WIS)	82	-	-	-	-	-	25.7	-70.3	-340.5	-	-	-	-1.9	-70.3	-316.7
Subtotal		293.1	11356.0	17.9	1041.5	-1356.0	6683.2	319.2	3351.3	408.9	-5991.3	-815.2	-8970.3	-1132.1	7470.4
Grand Total		-2486.8	48649.3	-371.4	5009.1	-664.7	15838.9	815.4	4921.2	-298.6	-8252.5	-2222.2	-10297.3	-5228.3	55868.7

**Distribution of Cost Changes (Current-Year Dollars)**  
As of Date: December 31, 1989

Weapon System	Cost Changes Between the Baseline and Current Estimate (Current-Year Dollars)																	
	Economic		Quantity		Schedule		Engineering		Estimating		Other		Support		Total			
	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date
Army:																		
AAWS-M	238.3	238.3	-	-	-6.1	-6.1	52.4	52.4	-61.4	-61.4	-	-	0.2	0.2	223.4	223.4		
ADDS	166.0	-254.1	-	185.8	128.3	166.3	31.4	-379.0	4.8	609.0	-	-	-	-208.2	330.5	119.8		
AH-64 (APACHE)	-68.6	581.6	-	1417.8	-	607.6	-	256.1	-12.7	3548.1	-	-	-93.2	1587.6	-174.5	7998.8		
ATACMS	49.5	53.7	516.6	996.4	23.8	23.8	-	-	-12.5	-114.8	-	-	-	-	577.4	959.1		
BRADLEY FVS	164.9	-303.0	289.5	4424.8	-12.2	757.3	103.7	2375.7	-39.6	3559.2	-	17.9	21.4	1311.7	527.7	12143.6		
CH-47D (CHINOOK)	45.7	211.0	-	749.0	-	-7.6	-	-	-47.4	680.6	-	-	-31.1	93.2	-32.8	1726.2		
FAAD C2I	52.4	66.9	-	-	-39.9	-	-	-	341.8	333.2	-	-	-	-	394.2	360.2		
FAADS LOS-F-H	609.2	609.2	-	-	179.1	-	-	-	-8.6	15.4	-	-	5.8	5.8	606.4	809.5		
FAADS LOS-R	72.5	72.5	-	-	2.8	2.8	-	-	-97.4	-97.4	-	-	44.3	44.3	22.2	22.2		
FAADS NLOS	195.9	195.9	-2292.1	-2292.1	-	-	-	-	0.7	0.7	-	-	-194.1	-194.1	-2289.6	-2289.6		
FHTV (PLS)	143.1	143.1	-	-	-	-	-	-	-0.9	-0.9	-	-	-31.8	-31.8	110.4	110.4		
FMTV	1297.9	1297.9	4037.9	4037.9	1480.2	1480.2	-	-	3.7	3.7	-	-	704.8	704.8	7524.5	7524.5		
HELLFIRE	36.3	174.1	-	797.1	-151.0	367.5	-	603.2	143.9	27.9	-	-	-15.5	18.9	13.7	1988.7		
LHX	147.6	119.2	-	-	-	-	-	-	56.8	1560.9	-	-	-	-	204.4	1680.1		
M1 TANK	-1047.3	-940.7	-4264.8	8061.6	-41.9	804.7	-587.5	1536.4	1032.6	6537.4	-	-	-1069.3	-355.7	-5978.2	15643.7		
MLRS	103.9	866.8	163.7	2205.5	0.5	-1.5	-	-	-72.0	-277.6	-	18.6	-23.9	62.5	172.2	2874.3		
MLRS-TGW	3.2	-9.1	-	-	-4.2	-	-	1.5	-19.1	88.2	-	-	-	-	-15.9	76.4		
MSE	258.9	221.6	-	83.0	-	-	-	-	-316.2	-1129.4	-	-	-	-	-57.3	-824.8		
OH-58D (AHIP)	4.8	-300.6	104.2	-959.3	-	177.0	540.4	663.6	24.6	358.5	-	-	191.0	-134.2	865.0	-195.0		
PATRIOT	68.6	2121.8	-	-816.5	-	2349.7	-	-103.2	-47.9	2218.6	-	27.6	-	1351.1	20.7	7149.1		
SADARM	668.5	668.5	-15.9	4354.9	-5.5	10.1	-	-	-76.6	-49.0	-	-	-	-	570.5	4984.5		
SINCgars	592.5	103.3	-	1229.4	182.1	882.8	-	16.3	-104.1	-811.1	-	-	25.2	-505.1	695.7	915.6		
STINGER RMP	115.0	5.5	53.9	906.8	6.4	241.7	-	3.7	-115.5	-1421.3	-	-	-9.3	-9.3	50.5	-272.9		
TOW 2	61.7	-88.4	-	512.7	-	102.4	244.3	570.6	-18.2	-212.5	-	-	-	-6.3	287.8	878.5		
UH-60A/L(BLACKHAWK)	136.8	1395.3	3604.0	4223.4	-	-43.0	-203.6	233.9	3935.1	7412.9	-	19.9	248.5	622.4	7720.8	13864.8		
<b>Subtotal</b>	<b>4117.3</b>	<b>7250.3</b>	<b>2197.0</b>	<b>30118.2</b>	<b>1607.4</b>	<b>8050.7</b>	<b>181.1</b>	<b>5831.2</b>	<b>4493.9</b>	<b>22778.9</b>	<b>-</b>	<b>84.0</b>	<b>-227.0</b>	<b>4357.8</b>	<b>12369.7</b>	<b>78471.1</b>		
Navy:																		
AN/BSY-1	13.2	-77.0	-	46.8	-	25.0	-	83.7	48.9	-61.1	-	-2637.6	-	386.6	62.1	-2233.6		
AN/BSY-2	122.1	117.9	-	-16.7	-	-	57.9	144.8	19.6	-38.5	-	-	-59.7	-58.6	139.9	148.9		
AN/SQQ-89	170.8	254.0	-24.2	-599.0	57.0	391.4	-	257.7	224.8	294.0	-	-	19.9	11.3	448.3	609.4		
AOE 6	120.8	120.8	-	-	1.2	1.2	-	-	230.6	230.6	-	-	-0.1	-0.1	352.5	352.5		
ASPJ	-0.2	-1.6	-	-	-	25.4	-	52.1	-42.1	249.3	-	-	-	-	-42.3	325.2		
AV-8B	51.9	-728.9	-	-1473.7	-	1410.8	-	732.5	-81.0	-1034.5	-	-	70.0	331.7	40.9	-762.1		
C/MH-53E	479.4	319.6	-290.7	5733.0	-322.3	-26.8	63.1	520.0	429.2	-203.7	-	3.0	-514.9	769.0	-156.2	7114.1		
CG 47 AEGIS	7.6	-889.2	-	11739.0	-	435.4	-	980.6	-573.2	-3313.6	-	-	-14.2	455.4	-579.8	9407.6		
CV HELO (SH-60F)	200.4	168.2	-	-	39.0	34.7	86.1	125.7	17.6	28.3	-	-	39.0	-30.0	382.1	326.9		
CVN-72/73	-41.6	-889.9	-	-	-	-	-	-	-10.6	-243.0	-	-	-5.2	-19.8	-57.4	-1152.7		
CVN-74/75	82.1	120.2	-	-	-	-644.4	-	-	-91.2	-225.9	-	-	-7.1	148.0	-16.2	-602.1		
DDG 51	1147.5	1181.2	4382.2	12378.7	-131.1	-115.3	-	-	-1479.4	-2848.6	-	-	90.8	353.9	4010.0	10949.9		
E-2C	129.1	6.8	678.0	2062.5	224.4	242.1	33.0	94.3	303.9	368.5	-	-	338.7	415.2	1707.1	3189.4		
E-6A (TACAMO)	10.7	-222.8	-	61.2	-	-5.5	-	47.6	-7.2	116.3	-	-	16.7	-251.4	20.2	-254.6		
EA-6B	140.5	586.6	1511.2	4163.9	-	325.2	-	0.4	248.9	-1514.2	-	-	793.9	1624.6	2694.5	5186.5		
F-14D	1385.0	1385.0	1226.8	-3729.9	-497.6	-528.7	386.6	386.6	833.1	2003.0	-	-	-1328.6	-1483.6	2005.3	-1967.6		
F/A-18	769.7	6633.8	-	2471.7	437.4	6008.6	-	2802.5	327.3	5310.0	-	6.5	404.0	3439.5	1938.4	26672.6		
FDS	17.2	14.7	-	-	-	-	113.5	175.2	487.2	517.0	-	-	76.6	125.3	694.5	832.2		
HARM	130.4	475.8	139.4	1693.6	36.8	1891.8	-	264.6	-99.8	239.2	-	-	19.2	127.8	226.0	4692.8		
HARPOON	184.3	299.6	-1097.5	-98.7	37.5	372.7	-7.0	109.2	284.1	1542.5	-	-	-131.9	451.9	-730.5	2677.2		
LAMPS MK III	125.5	-154.4	-	-228.9	-	1603.7	-	348.8	85.6	420.1	-	-	16.0	275.0	227.1	2264.3		
LCAC	87.3	-383.9	33.1	1276.5	-4.8	28.5	-	2.8	-127.8	249.4	-	-	0.1	76.1	-12.1	1249.4		
LHD 1	149.4	-1369.1	-	4005.5	-17.8	-224.6	67.9	67.9	-181.0	-965.2	-	-	-7.3	120.4	11.2	1634.9		
LSD 41	-3.5	-544.7	-	-1476.4	-	-	-	-6.3	-4.8</td									

**Distribution of Cost Changes (Current-Year Dollars)**  
As of Date: December 31, 1989

Weapon System	Cost Changes Between the Baseline and Current Estimate (Current-Year Dollars)																		
	Economic		Quantity		Schedule		Engineering		Estimating		Other		Support		Total				
	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	This Qtr	To Date	
UHF FOLLOW-ON	64.1	64.1	-	-	-	-	-	-	-59.9	-59.9	-	-	-	-	4.2	4.2			
V-22	-	-4.7	-	-20638.1	-	8.4	-	-	239.1	46.5	-	-	-6434.9	239.1	-27022.8				
Subtotal	11572.8	-1051.4	-1207.8	59222.4	-278.7	14168.0	968.8	12994.2	315.5	-9217.1	-927.4	-3142.7	-850.5	3433.9	9592.7	76407.3			
Air Force:																			
AMRAAM	628.2	-1478.9	-	-39.2	138.4	535.7	-	378.7	2499.4	4499.4	-	-	27.0	-601.9	3293.0	3293.8			
ATARS	2.0	-15.1	-	-1081.3	-	-	21.9	-10.2	-4.0	-	-16.4	-7.8	-7.8	-16.0	-1102.7				
ATF	575.4	-97.1	-	-467.7	132.1	527.3	-	-109.8	137.0	-1078.1	-	-	283.0	844.5	844.5	-942.4			
B-1B	42.8	-1757.8	-	-	-22.6	-22.6	-	476.0	-87.5	-613.8	-	-	74.3	-174.7	7.0	-2092.9			
C-17A	2874.3	-3490.9	-	-	512.1	1059.0	-	381.8	1263.8	2891.0	-	-	-292.9	1217.2	4357.3	2058.1			
DMSP	53.2	-115.1	-	190.2	-	1.9	-18.4	-84.0	-28.8	-131.1	-	-	-50.0	30.6	-44.0	-107.5			
DSCS III	31.7	117.7	-	55.3	-	129.6	-23.1	529.7	13.0	212.7	-	77.4	-	-	21.6	1122.4			
DSP	139.3	-30.8	-463.7	2267.6	41.8	112.3	-	-	316.3	-184.4	-	-	-29.5	601.8	4.2	2766.5			
F-15	257.6	670.9	-	12178.7	-	1457.5	-52.3	2638.6	-27.8	166.4	-	767.7	-503.7	4902.9	-326.2	2278.2			
F-16	2171.9	-140.5	-	22866.1	-	2128.1	-2103.0	16528.7	-313.7	-4383.7	-	56.4	-483.9	9932.1	-728.7	46987.2			
IR MAVERICK(AGM-65)	25.9	-166.1	-275.8	-1031.9	-50.9	1814.8	-1.7	22.5	-92.6	435.8	-	-	11.6	148.6	-383.5	1223.7			
IUS (SPACE SHUTTLE)	22.5	6.0	-	-489.3	-	-	-	109.5	16.9	47.9	-	-	5.9	-8.2	45.3	-334.1			
JSTARS	679.8	679.8	-	-	-	25.7	-	-	-386.2	-498.2	-	-	-6.4	-30.4	287.2	176.9			
JTIDS	22.5	-25.6	10.0	740.9	-	22.8	-	352.7	-101.7	287.8	-	-	-	56.1	-69.2	1434.7			
KC-135R	888.5	209.6	-99.8	5956.9	-222.2	181.2	-	-	-1004.2	-2214.2	-	-	202.1	371.2	-235.6	4504.7			
LANTIRN	60.9	-314.6	-239.2	-265.0	20.2	53.0	-1.6	-29.3	-89.9	381.7	-	-	20.5	152.3	-229.1	-21.9			
MARK XV IFF (CIS)	0.5	0.5	-	-	-	-	-	-	-2628.0	-2628.0	-663.7	-663.7	-800.0	-800.0	-4091.2	-4091.2			
NAVSTAR GPS	148.0	25.2	114.4	959.3	-	623.6	-	613.1	-165.3	-715.1	-	-	229.0	553.7	326.1	2059.8			
NAVSTAR USER EQMT	282.8	61.0	215.9	135.9	215.1	347.5	-	-	-54.9	660.7	604.8	-	-	264.0	-201.6	1638.5	892.7		
OTH-B	34.9	-55.5	-127.0	285.9	6.5	62.0	-	190.1	109.5	93.5	-	-	-12.3	-5.0	11.6	571.0			
PEACEKEEPER	235.8	-674.8	-3011.7	-2634.1	-	1059.9	-467.8	-564.9	-44.6	2664.3	-	-	-609.6	-1936.4	-3897.9	-2086.0			
RAIL GARRISON	252.0	252.0	-	-	36.0	36.0	331.5	331.5	-254.0	-254.0	-	-	-64.0	-64.0	301.5	301.5			
SFW	332.9	283.8	-	756.8	101.8	184.5	-	-	229.1	235.8	-	-	3.8	11.7	667.6	1472.6			
SMALL ICBM	87.4	322.0	457.9	-12146.9	-	-	-	-	1.5	169.9	1343.2	-7490.1	-	-18307.7	1890.0	-37452.8			
SRAM II	130.4	114.7	-	-	2.0	2.0	-	163.9	-151.8	-262.6	-	-	-74.2	-108.2	-93.6	-90.2			
TACIT RAINBOW	340.0	334.3	295.1	-704.3	20.5	311.6	-	175.0	38.4	499.8	-	-	141.9	-146.6	835.9	469.8			
TITAN IV	453.2	424.7	3248.4	10084.1	51.2	20.0	-898.8	-1975.0	1591.7	4970.2	-	-	362.1	955.9	4807.8	14479.9			
TRI-TAC	26.3	-62.6	-49.0	-15.5	-	38.1	-8.0	7.7	-89.9	-599.4	-	-	-16.2	-101.0	-136.8	-732.7			
WAM (WIS)	41.9	-164.0	-	-	23.2	-	30.9	-110.4	-254.1	-	-	-	-	-2.4	-68.5	-366.4			
Subtotal	10842.6	-5087.2	75.5	37602.5	982.0	10734.7	-3243.2	20134.4	1290.7	4340.3	679.5	-7268.7	-1608.3	-3278.8	9018.8	57177.2			
Grand Total	26532.7	1111.7	1064.7	126943.1	2310.7	32953.4	-2093.3	38959.8	6100.1	17902.1	-247.9	-10327.4	-2685.8	4512.9	30981.2	212055.6			

**Program Funding Status (Dollars in Millions)**  
**As of Date: December 31, 1989**

Weapon System	Prior Years	FY 90 Budget	FY 91 Budget	Balance of Program	Total
<b>Army:</b>					
AAWS-M	226.3	137.9	92.4	3703.3	4159.9
ADDS	519.3	19.1	43.9	2575.7	3158.0
AH-64 (APACHE)	9820.4	1602.4	164.7	201.1	11788.6
ATACMS	601.9	134.5	187.2	1257.8	2181.4
BRADLEY FVS	8392.2	667.3	722.4	2798.6	12580.5
CH-47D (CHINOOK)	2505.5	275.8	280.0	227.7	3289.0
FAAD C2I	354.4	84.8	101.1	1683.6	2223.9
FAADS LOS-F-H	345.9	263.7	280.8	5944.8	6835.2
FAADS LOS-R	216.9	122.4	123.1	826.5	1288.9
FAADS NLOS	262.9	122.1	99.1	146.7	630.8
FHTV (PLS)	32.9	52.6	150.6	1871.2	2107.3
FMTV	34.6	18.1	63.3	15977.1	16093.1
HELLFIRE	1768.5	127.5	153.8	642.3	2692.1
LHX	621.2	274.2	465.1	2452.6	3813.1
M1 TANK	18116.8	1336.9	845.0	124.4	20423.1
MLRS	4103.9	517.5	373.5	1333.4	6328.3
MLRS-TGW	172.9	28.4	47.2	39.1	287.6
MSE	3313.2	934.7	29.2	32.1	4309.2
OH-58D (AHIP)	1489.1	192.3	73.8	581.4	2336.6
PATRIOT	10479.4	709.3	635.0	565.9	12389.5
SADM	351.8	142.8	105.5	6171.2	6771.3
SINCgars	785.4	113.5	312.7	5315.7	6527.3
STINGER RMP	1070.6	114.7	252.4	1250.6	2688.3
TOW 2	1967.3	186.8	307.8	1040.4	3502.3
UH-60A/L(BLACKHAWK)	5937.5	430.7	469.3	9334.6	16172.1
Subtotal	73490.8	8610.0	6378.9	66097.8	154577.5
<b>Navy:</b>					
AN/BSY-1	1309.2	26.9	92.8	165.1	1594.0
AN/BSY-2	710.7	467.3	486.5	1340.2	3004.7
AN/SQ-89	2426.1	372.0	452.9	2458.7	5709.7
AOE 6	939.7	385.4	409.0	1453.2	3187.3
ASPJ	487.4	13.7	11.5	49.0	561.6
AV-8B	7168.3	585.0	565.5	44.6	8363.4
C/MH-53E	2900.4	237.8	479.4	4074.9	7692.5
CG 47 AEGIS	23156.0	66.0	84.5	184.6	23491.1
CV HELO (SH-60F)	982.2	119.0	300.7	2098.8	3500.7
CVN-72/73	6173.5	42.6	22.0	28.1	6266.2
CVN-74/75	6215.9	-	-	148.0	6363.9
DDG 51	7395.3	3506.0	3680.2	16485.9	31067.4
E-2C	5166.4	379.2	448.4	3116.9	9110.9
E-6A (TACAMO)	1956.2	37.0	3.9	-	1997.1
EA-6B	3018.9	170.7	385.6	4359.1	7934.3
F-14D	2956.4	1635.2	1118.4	17344.3	23054.3
F/A-18	25463.6	2068.3	2123.2	9892.8	39547.9
FDS	256.3	157.1	211.8	7227.2	7852.4
HARM	4386.9	406.1	384.2	1925.5	7102.7
HARPOON	3235.6	224.4	244.3	4.7	3709.0
LAMPS MK III	4096.8	239.7	213.5	1621.9	6171.9
LCAC	1394.3	275.2	292.8	897.8	2860.1
LHD 1	3871.1	56.8	971.1	1186.9	6085.9
LSD 41	2421.3	9.1	24.9	-	2455.3
LSD 41 CV	269.7	230.2	240.0	955.2	1695.1
MCM 1	1354.7	346.9	15.8	40.0	1757.4
MK-48 ADCAP	2515.1	474.5	423.3	4002.5	7415.4
MK-50 TORPEDO	1767.4	333.1	372.5	4818.2	7291.2
NATO AAWS	16.5	13.7	17.1	196.1	243.4
P-3C	1441.5	-	-	-	1441.5
P-7A (LRAACA)	65.7	199.0	255.4	7952.8	8472.9
PHALANX CIWS	2257.9	145.6	148.9	411.6	2964.0
PHOENIX (AIM-54C)	2755.4	325.6	-	2.5	3083.5
SEA LANCE	518.1	81.5	-	-	599.6
SLAT	183.9	27.0	40.5	63.8	315.2
SPARROW (AIM-7M)	2780.8	-	-	-	2780.8
SSN 21	3850.0	816.9	3725.3	7585.0	15977.2
SSN 688	26294.9	782.0	51.2	373.9	27502.0
STD MSL 2	5353.6	553.1	702.2	3114.7	9723.6
T-AO FLEET OILER	2693.1	6.5	18.8	47.8	2766.2
T45TS	1460.7	160.1	344.8	3941.6	5907.2
TOMAHAWK	6893.2	702.6	933.5	1231.9	9761.2
TRIDENT II MSL	15463.1	1635.7	1653.1	18538.2	37290.1
TRIDENT II SUB	11413.4	1249.7	1415.2	4152.3	18230.6

**Program Funding Status (Dollars in Millions)**  
**As of Date: December 31, 1989**

Weapon System	Prior Years	FY 90 Budget	FY 91 Budget	Balance of Program	Total
UHF FOLLOW-ON	319.3	287.7	152.6	775.7	1535.3
V-22	2377.1	262.4	-	-	2639.5
Subtotal	210133.6	20114.3	23517.3	134312.0	388077.2
Air Force:					
AMRAAM	3486.6	829.1	1367.6	9202.1	14885.4
ATARS	92.3	45.6	33.4	18.5	189.8
ATF	1898.7	1144.1	1058.2	10250.6	14351.6
B-1B	26790.7	10.0	66.8	577.2	27444.7
C-17A	5102.7	2351.1	2722.3	31635.8	41811.9
DMSP	981.3	163.4	200.9	425.9	1771.5
DSCS III	1491.6	73.3	80.4	370.7	2016.0
DSP	5676.9	494.0	474.4	1668.8	8314.1
F-15	26239.2	1529.7	1839.9	529.1	30137.9
F-16	28891.1	3220.3	2972.7	17957.6	53041.7
IR MAVERICK(AGM-65)	2625.8	173.5	7.3	10.0	2816.6
IUS (SPACE SHUTTLE)	1289.7	39.7	19.1	329.7	1678.2
JSTARS	1457.7	132.8	310.0	6309.9	8210.4
JTIDS	1083.8	179.1	178.9	375.4	1817.2
KC-135R	5031.6	594.5	492.5	6215.3	12333.9
LANTIRN	3353.5	253.6	194.2	-	3801.3
MARK XV IFF (CIS)	262.7	37.7	-	-	300.4
NAVSTAR GPS	2200.9	80.9	250.6	1834.1	4366.5
NAVSTAR USER EQMT	1531.9	230.6	252.5	3753.5	5768.5
OTH-B	1245.4	219.6	265.9	259.5	1990.4
PEACEKEEPER	15650.0	681.2	676.4	2586.6	19594.2
RAIL GARRISON	888.2	992.5	2162.6	3085.0	7128.3
SFW	151.9	25.1	23.9	3677.5	3878.4
SMALL ICBM	3238.1	100.0	202.2	3734.8	7275.1
SRAM II	443.0	226.3	178.1	1455.8	2303.2
TACIT RAINBOW	383.1	27.4	271.9	3441.4	4123.8
TITAN IV	4737.2	1400.6	1120.3	9751.0	17009.1
TRI-TAC	999.5	43.6	85.2	214.5	1342.8
WAM (WIS)	705.9	143.8	131.5	509.4	1490.6
Subtotal	147931.0	15443.1	17639.7	120179.7	301193.5
Grand Total	431555.4	44167.4	47535.9	320589.5	843848.2